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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,344

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Vaddu Venkata Narayana Reddy

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05/28/2009

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EXAMINER

KATAKAM, SUDHAKAR

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

05/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,344	Applicant(s) REDDY ET AL.	
	Examiner Sudhakar Katakam	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-51, 54, 65, 67 and 82-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-51, 54, 65, 67 and 82-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the application

1. Receipt of Applicant's request for continued examination filed on 13th April 2009 is acknowledged.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13th April 2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 45-51, 54, 65, 67 and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Masahiro et al** (JP 55-136245).

Masahiro et al teach optical resolution of alpha-isopropyl-p-chlorophenylacetic acid (\pm)(ICPA), please note that ICPA is also known as 2-(4-chlorophenyl)-3-methyl butanoic acid (CPA), using optically active alpha-phenyl-beta-p-tolyl-ethylamine(PTE) or optically active alpha-phenylethylamine (PEA). The process comprises the following teachings (see page 10-11) of the translated patent):

Reacting (\pm) ICPA with (+) PTE or (-) PEA in the mixed solvent system at 40 to 150°C. When this is heated and maintained at 40 to 150°C, the salt by no means needs to be completely dissolved. After heating is carried out and the temperature is maintained at that temperature, the crystal of the salt of the (+) ICPA obtained after cooling should be separated from the mother liquor.

Needless to say at this time, the ICPA in the mother liquor is a (-)-body. The separation temperature should be 0 to 60°C and preferably 10 to 30°C. Next, further refining of the above mentioned salt crystal is carried out as needed in the mixed solvent made up of the hydrophobic organic solvent and the hydrophilic organic solvent and / or water. Refining should be carried out by heating at 40 to 150°C and maintaining that temperature in the mixed solvent. Thereafter, it should be cooled to 0 to 60°C and the crystal should be separated. Even when this heating temperature is maintained, the salt crystal need not necessarily be completely dissolved.

Masahiro et al also teach C₁-C₅ alcoholic solvents for the process and the recovered (+) ICPA having optical rotation greater than +40.5° [see page 9 and examples]. The resolving agent in the amount of 0.5 to 1 mol used per mole of ICPA [see page 9]. The mineral acid used for separating (+) ICPA is hydrochloric acid [see examples] and sulfuric acid [see page 10].

The difference between **Masahiro et al** and instant claims is that the **Masahiro et al** do not exemplify the same solvent system, which used for the initial reaction process, for refining the crystallized salt to obtain (+) ICPA.

However, **Masahiro et al** clearly suggested that further refining of the above mentioned salt crystal is carried out as needed in the mixed solvent made up of the hydrophobic organic solvent and the hydrophilic organic solvent and / or water.

The claims would have been obvious because, a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product, not of innovation, but of ordinary skill and common sense.

The claims would have been obvious because the design incentives or market forces provided a reason to make an adaptation, and the invention resulted from application of the prior knowledge in a predictable manner.

All the claimed elements were known in the prior art and one skilled person in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would

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have yielded predictable results to have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Therefore, in view of explicit teachings of the above cited reference, the examiner asserts that it would have been obvious to a person of ordinary skill in the art, at the time of the invention was made, to have the teachings of reference to make (+)-2-(4-chlorophenyl)-3-methyl butanoic acid (also known as alpha-isopropyl-p-chlorophenylacetic acid) with a reasonable expectation of success.

Modifying such methodology is prima facie obvious because an ordinary artisan would be motivated to use reaction conditions from the known processes to make the optically active compound more efficient or explore economical advantages over the other, since it is within the scope to optimize the conditions through routine experimentation.

Response to Arguments

5. Applicants' arguments filed on 14th April 2009 have been fully considered but they are not persuasive.

Applicants' arguments are moot in view of the above new grounds of rejection.

Conclusion

6. No claim is allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhakar Katakam/
Examiner, Art Unit 1621

/Karl J. Puttlitz/
Primary Examiner, Art Unit 1621